

ACSM **FIT** SOCIETY PAGESupported by  Liberty Mutual.**THEME: MANAGING CHRONIC DISEASE****Managing COPD**

by Michael Berry



Chronic obstructive pulmonary disease, or COPD, refers to lung diseases that affect a person's ability to breathe. More than 12 million Americans have COPD, and many more may have the disease and not even know it. COPD is a major cause of disability and is the third leading cause of death in the United States. The diseases most commonly associated with COPD are chronic bronchitis and emphysema. Both primarily result from long-term smoking. Individuals with COPD may have one or both of these diseases.

To better manage COPD, it is beneficial to understand how the lungs work and how COPD affects them. Inspired air travels down the windpipe and into the airways that go to the lungs. These airways are known as bronchial tubes. The bronchial tubes then branch into thousands of smaller, thinner airways called bronchioles which terminate in tens of thousands of tiny round air sacs called alveoli. Surrounding

the alveoli are tiny blood vessels known as capillaries.

When the inspired air reaches the alveoli, oxygen moves from the alveoli into the blood and carbon dioxide moves from the blood into the alveoli. The air in the lungs is then exhaled. The bronchioles and the alveoli can be thought of as a balloon. When air is inspired, they expand. When air is exhaled, they get smaller.

In COPD, less air flows in and out of the bronchioles for a variety of reasons:

- The alveoli become larger and decrease in number and the bronchioles and alveoli lose their ability to expand and contract. This happens primarily in emphysema.
- The bronchiole walls become thick and inflamed and produce more mucus than usual which tends to block them. This is primarily what happens in chronic bronchitis.

The primary symptoms of COPD include shortness of breath, a chronic cough and increased sputum and mucus production. Because COPD develops slowly, people often ignore the symptoms, and diagnoses may not occur until a person is middle-aged or older. Eventually symptoms can limit a person's ability to do routine activities. It is often at this point that patients will seek medical attention. While COPD cannot be cured, with early detection and appropriate management of the disease, symptoms can diminish and disease progression may slow.

Any individual who has a cough that lasts longer than a month should visit a physician. This is especially true of smokers. If diagnosed with COPD, the most important thing a person can do to manage the disease is to stop smoking. Only a very small number of patients can give up

*(continued on page 2)***Letter from the Editor**

by Dixie L. Thompson, Ph.D., FACSM

Welcome to the spring 2012 edition of the **ACSM Fit Society® Page, supported by Liberty Mutual.** Incorporating exercise into your daily routine can be an important ally in managing chronic diseases and will provide a multitude of benefits. In this issue, we share the basics of managing chronic diseases like COPD, depression, diabetes and arthritis through physical activity. We'll give you several ideas for ways to build physical activity into your lifestyle and as a result help prevent or manage chronic disease.

After you have read this information that ACSM experts have prepared for you, please feel free to share it with friends and family. We hope these articles will help you understand your unique needs and identify the exercise program that's right for you!

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**INSIDE THIS ISSUE:**

- 1 | Letter from the Editor
- 1 | Managing COPD
- 2 | Q&A with ACSM
- 3 | Strategies for Managing Diabetes

- 3 | Exercise and Cardiovascular Disease
- 4 | Exercise and Arthritis
- 5 | Basic Strategies for Managing Depression with Physical Activity
- 6 | The Athlete's Kitchen

smoking cold turkey. Most require professional help, and patients should talk to their physicians. Doctors may prescribe medicines to help patients quit and/or refer them to stop-smoking professionals.

### Taking action

COPD patients should see their physicians at least twice a year. These visits will often include different lung tests. COPD patients should be sure and take their medicines as prescribed, even if they are feeling well. There are a variety of medications that help decrease inflammation of the airways and mucus production and help keep the airways open. Patients may receive supplemental oxygen, which can help increase the amount of oxygen that gets in the blood. COPD patients should talk to their physicians about the severity of their symptoms. Often, changing medicines can have a big effect on how well a patient feels. COPD patients should have a yearly flu shot, and if their breathing worsens,

they should see their physicians (or go to the hospital immediately if symptoms suddenly become severe).

COPD patients should avoid exposure to smoke and other inhaled irritants such as paint fumes or insecticides. They should avoid going outdoors when there is a great deal of smog or if ozone levels are high, as these can further inflame the bronchiole tubes.

If overweight, COPD patients should lose weight. Carrying excess body weight can make it even more difficult to breathe, especially when sleeping. When lying down, the extra weight can press on the lungs and cause further collapse of the airways.

### Exercise is Medicine!

COPD patients should exercise regularly. This exercise should include activities such as walking and strength training. Regular

exercise will help prevent deconditioning which can increase shortness of breath symptoms. Because COPD can also lead to a loss of muscle, strength training can help counter loss of balance. COPD patients should talk to an ACSM-certified expert for help in planning an exercise program.

COPD patients should seek emotional help if needed. Having COPD can increase stress and lead to fear, anxiety, depression, and stress. If patients feel any of these emotions, they should talk with their physicians or a professional counselor. Patients should also consider joining a support group. They can often help patients adjust to living with the disease.

While COPD cannot be cured, following the above guidelines can help COPD patients manage and delay the progression of their disease, feel better and live a more active and productive life.

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## Q&A

by Anthony Luke, M.D., FACSME

### Q: I don't really understand osteoporosis and what is recommended for monitoring. I'm a 54-year-old woman now and am healthy and active.

A: Osteoporosis is a disorder resulting in weak and fragile bones. Being female and aging are risk factors, as estrogen levels and bone density decrease when one is post-menopausal. Other risk factors for osteoporosis include previous fractures—especially those involving the spine—family history of fracture, low body weight and current cigarette smoking.

The most common test to measure bone density is called a DEXA bone density test. The current recommendations are that individuals should have their bone density tested if they are older than 65, or after age 50 with any risk factors as suggested above. There is a useful website where you can put some statistics and get an estimate of your fracture risk assessment tool (FRAX) at <http://www.shef.ac.uk/FRAX/tool.jsp>. This can help judge future action steps to monitor the progression of osteoporosis

Exercise and adequate vitamin D and calcium intake are important early treatments to prevent poor bone mineral

density. The recommended daily intake is 1000 mg of calcium for adults up to age 50. Women over 50 and men over 70 should increase their intake to 1200 mg per day. The recommended daily vitamin D intake for adults up to age 70 is 600 IU (International Units) and increases to 800 IU after age 70.

Since you are under 65 and do not suggest you have any risk factors, your risk for osteoporosis is low. A bone density test would not typically be recommended at this time. Remaining active with some modest-impact physical activity (brisk walking or jogging) and resistance training will help you maintain good bone health.

### Q: I have high blood pressure (145/92 mmHg) and am a 48-year-old African-American male. I know I have several risk factors for cardiac disease. I've been told a water pill is the best thing to start. Is this the right one for me?

A: A diuretic ("water pill") is a drug that increases the excretion of water from the body, which lowers one's fluid volume to reduce blood pressure. This is typically one of the common first medications used by a physician to treat high blood pressure.

Hydrochlorothiazide, which is probably the most common antihypertensive, is selected

(continued on page 7)

# Strategies for Managing Diabetes

by Sheri Colberg, Ph.D., FACSM



Diabetes is a disease that potentially causes debilitating, long-term complications. What you don't know or choose to ignore about your blood sugars can and will hurt your health in the long run. The good news, however, is that diabetes is a manageable condition, and staying on top of your blood sugars is likely to prevent you from developing associated health problems.

So, how can you get control over your blood sugars? The key to managing diabetes of any type is to know and address the main factors that can pump up your insulin action and positively impact your blood sugars. Making small changes in any of these areas can have an enormously beneficial effect on your diabetes control.

## Always Keep Moving

This factor is probably the most important one to keep in mind. A recent study showed that just three days of being inactive leads to greater blood glucose spikes after meals. Your muscles have a limited capacity to store carbohydrates as muscle glycogen, so whenever you eat a meal with any carbohydrate in it, your body uses some and stores the rest for later. During exercise of moderate intensity and higher, you use glycogen and create the space to store your dietary carbs. If you never use muscle glycogen being active, the extra calories you eat are likely to be stored as body fat. Doing either higher-intensity aerobic or resistance training is particularly important for retaining muscle mass as you age, which enhances your glycogen storage capacity. Simply doing more daily movement by standing and taking more steps can help manage your diabetes. Daily activity is important in

helping the muscles maintain their ability to use carbohydrates as an energy source; thus helping keeping blood sugar lower.

## Avoid Foods with a Glycemic Punch

Addressing your diet is equally important for improving your diabetes control. When your diabetes was diagnosed, you may have been told that you can eat most all foods and still manage your diabetes. While that is mostly true, certain foods, such as rapidly absorbed carbohydrates, can have a profound effect on your blood sugar. Eating anything refined (including foods or drinks made with white sugar, white flour, white rice, white potatoes, etc.) can cause big spikes in your blood sugar, which is bad for your heart and your long-term health. Those foods are best avoided or eaten in very limited quantities.

On the other hand, eating more natural foods (for example, most vegetables, many fruits, nuts, and whole grains) is both diabetes-friendly and heart-healthy. Cut out some refined carbs from your diet today and use your blood glucose meter to see the positive effects.

## Prevent Weight Gain

Studies on diabetes prevention have shown that even modest weight loss of five to seven percent of total weight (likely only 10 to 15 pounds for most people) helps lowers your risk of developing type 2 diabetes. With diabetes, losing a similar amount of weight has beneficial effect on blood sugar control. If you struggle to lose weight, try to at least prevent yourself from gaining any more weight through increased daily movement and better food choices. Some diabetes medications can cause weight gain, so talk with your health care provider about whether yours may be sabotaging your efforts to lose weight and if you can try taking another one instead.

## Control Your Stress

When you experience any type of mental or physical stress your body releases more glucose-raising hormones such as adrenaline. Being mentally stressed, angry or upset also causes more cortisol to circulate in your bloodstream, making your muscles more insulin resistant, your morning blood sugar elevated and your body weight potentially greater. Physical stressors such as illness or infection can cause similar increases in blood sugar. To manage your stress, spend some time every day doing deep breathing, meditation, stretching or engaging in yoga, tai chi or another calming activity.

## Get Your Beauty Sleep

Lack of sleep increases your body's cortisol levels. This means that getting inadequate sleep has the added effect of raising your blood sugar levels and possibly causing you to gain weight. Try to get around seven to eight hours of sleep each night. If you are sleeping fitfully, get checked to see if you have a treatable condition such as sleep apnea that may be waking you up and adding to your blood sugar.

In conclusion, while you can better manage your diabetes without making all of these changes at once, realizing where you have room for improvement is the first step. Your blood sugar responses to any situation can vary from day to day, but it is important to have a general idea of what affects them most and how to control them. If you can cut out even one high spike in your blood sugar each day by making some of these small changes, then you are truly on the right path to better control your diabetes.

# Exercise and Cardiovascular Disease

by Dixie L. Thompson, Ph.D., FACSM



Exercise has a multitude of benefits for the body and the mind. Some of the most profound benefits are on the cardiovascular system. The cardiovascular system is made up of the heart and the blood vessels that take the blood to (the arteries) and from (the veins) the body's tissues. According to statistics from the American Heart Association, approximately one out of every three deaths of adults in the U.S. can be attributed to cardiovascular disease (CVD). Given the fact that CVD is the top killer of U.S. adults, finding ways to fight this foe is critical.

(continued on page 4)

Exercise is a powerful tool in combatting CVD. Being physically active helps prevent the onset of CVD, and in those who already have CVD, it can be an important way to treat the disease. Regular exercise lowers the chance of developing hypertension, atherosclerosis, high cholesterol, stroke and other conditions associated with CVD. In terms of prevention, being regularly physically active has been shown to decrease the risk of CVD by 25-50%. Studies have shown this to be true in women and men. It is also important for people of various ages, weight status and race. In other words, if you are not currently exercising, you are missing out on a critically important way to protect your health. If you are one of those fortunate people who does not yet have any evidence of CVD, you are already ahead of the game! But don't let that lull you into complacency. Take an active approach to protecting your health and find ways to build exercise into your normal routine.

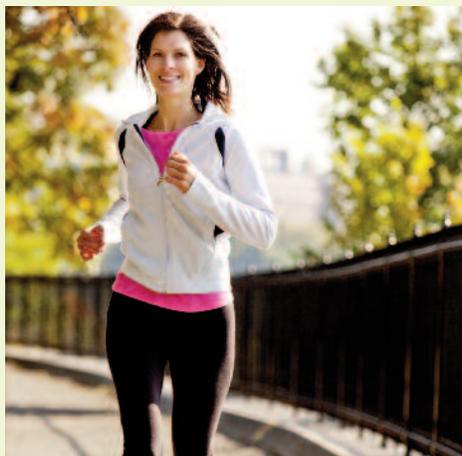
For those who already have CVD, exercise is a vitally important compliment to other treatments. As an example from our work at the University of Tennessee, we showed that by getting post-menopausal women with high blood pressure to begin walking, they could lower their blood pressure significantly. These women had an average age of 53 years and were inactive before the study began. At the start of the study, they had an average blood pressure of 142 mmHg and several had to take medicine to keep their blood pressure down. The women began a walking program in which we asked them to add 2 miles of walking to their daily routine. We used pedometers to track their progress and on average they added 4300 daily steps. After 24 weeks of this program, their blood pressure fell by 11 mmHg. That may not sound like a dramatic change, but it translates into about a 20% reduction in their risk of dying from CVD! Think about that—walking, an activity that many people can adopt into their daily habits, that takes about 30 extra minutes each day might be able to significantly lower your chance of dying early from cardiovascular disease. Isn't it worth the time investment?

So what does it mean to be physically active? The current *Physical Activity Guidelines for Americans* recommends that each week adults should accumulate a minimum of 150 minutes of moderate-intensity aerobic exercise, or 75 minutes of vigorous-intensity aerobic exercise, or a combination of both. The *Guidelines* also recommend two or more days of muscle strengthening exercise each week. As

researchers learn more about different types of activities, we are coming to understand that both aerobic and muscle-strengthening exercise contribute substantially to health. By getting both types of activity into your routine, you will reap benefits not only for your cardiovascular system, but also for weight control, diabetes prevention, bone health, mental health, etc. It is important to recognize that these *Physical Activity Guidelines* should be modified to fit the needs of each person. For a person who has not been exercising, starting off slowly and gradually working up to the minimum is appropriate. For a person who has been active and wants to get even greater benefits, finding ways to build more exercise into one's weekly routine is suggested.

There are many good resources available for those who want to learn more about getting and staying active and fit. The website of the American College of Sports Medicine ([www.acsm.org](http://www.acsm.org)) has a wealth of information for the general public. Also, the Exercise is Medicine website ([exerciseismedicine.org](http://exerciseismedicine.org)) has useful information and a step-by-step plan for becoming more active. The U.S. Department of Health and Human Services has information for individuals who would like to build the physical activity guidelines into their normal routine ([www.health.gov/paguidelines](http://www.health.gov/paguidelines)).

You should also remember that healthcare and exercise professionals can provide guidance for using exercise safely and effectively. Use the expertise of these professionals to help build a program that is right for you! It is particularly important for those with known CVD to discuss your exercise plans with your physician. My hope is that your healthcare provider is already encouraging you to be active. Regardless of your current health status, building exercise that is appropriate for you into your daily routine will yield benefits!



## Exercise and Arthritis

by A. Lynn Millar, P.T., Ph.D., FACSM



Arthritis, suffered by more than 46 million adults in the U.S., is the most cited cause of movement limitation. One of the most effective treatments for arthritis—and the one with the least serious side effects—is exercise. Often individuals limit motion of an affected joint when they start to have the symptoms that are common to arthritis. Sadly, limiting activity actually can lead to decreased movement and more pain, not less pain. On the other hand, continuing with activity, with some changes, will usually allow one to maintain function and decrease the associated pain.

Regular exercise is important for controlling the effects of arthritis. The primary components of exercise, as identified by ACSM, include aerobic, resistance, flexibility (range of motion) and neuromuscular activity. Research has shown that people with arthritis fall below their counterparts in all of these fitness parameters. However, starting a regular program will result in improvements in all aspects of fitness, which translates into decreases in pain and improvements in function.

Walking is an excellent aerobic activity, one that does not require special equipment, and it is very functional. If you have lower extremity arthritis, you will want to make sure that you have good, supportive walking shoes. It is best to start walking on flat, even surfaces, then progress to hills, etc. If you have not been exercising on a regular basis, start with 5- to 10-minute sessions, two times a day if possible. Start with what you consider to be a mild intensity, and slowly progress intensity and time as tolerated. ACSM guidelines recommend aerobic exercise a minimum of 3 to 5 days per week. If your arthritis is too severe to tolerate even a short walk, try cycling or swimming.

(continued on page 5)

Strength, especially in the lower extremities, helps absorb forces to the joints during activity. Body-weight-only activities, such as partial squats, push-ups, etc. are a good way to start improving strength. Elastic tubing is another simple, low-cost training tool that can be used initially. ACSM guidelines recommend 2 to 3 days per week for resistance exercise. Start easy with 10 to 15 repetitions with low resistance in order to determine your tolerance. While activity will often cause your joint symptoms to increase slightly as you get started, the pain should not persist too long after the activity, or get worse. If it does, then you need to reduce the intensity (amount of resistance and repetitions).

Stiffness is the hallmark of arthritis, and range-of-motion exercise is the key to temporarily reducing stiffness. A joint with arthritis should be moved through its complete range several times in succession (5 to 15, depending on the amount of stiffness), and numerous times throughout the day. You should do range of motion on a daily basis.

Flexibility relates to more than just the joint. It involves the ability of a muscle to move through its full range. Some muscles are prone to becoming tight, such as the hamstrings (back of the thigh). Stretching improves flexibility, though again, only temporarily. Static stretches are the easiest to do at home and involve moving into a position that causes a gentle pull on the muscle. It is important not to stretch too forcefully or past the normal range for a joint. To be effective, hold the stretch between 15 and 30 seconds. If a muscle is extremely tight, the stretch should be repeated three times.

Balance problems can occur with lower-extremity arthritis. You can work on balance at home by doing simple weight shifts from one leg to the other. Progress to standing on one leg, first with support, then later without support. Tai chi is a popular group activity that is good for balance. Some Tai chi programs have been adapted to meet the needs of individuals with arthritis.

If you have arthritis, starting a regular exercise program can provide you with multiple benefits. Check with your physician about any specific movement or activity restrictions. You may find it easier to get started by going to a group class or working with a fitness professional. If so, try to find someone with knowledge of arthritis.

Finally, pay attention to how you are feeling. While there may be a temporary

increase in joint discomfort, the pain should not persist or get worse. In addition, you may fatigue more quickly, thus may need to use shorter training sessions. Regularity is the key—keep moving!

## THEME: MANAGING CHRONIC DISEASE

# Basic Strategies for Managing Depression with Physical Activity

by Meghan Oefinger



During a yearly physical exam a doctor may take time to emphasize the value of regular physical activity for your heart, to prevent or manage diabetes, to lose weight and lower blood pressure. Today more professionals are realizing that one's physical health is closely tied to one's mental health. According to the National Alliance on Mental Illness (NAMI), mental illness affects one in four adults and one in 10 children. Major depression affects about six percent of the adult population and about eight percent of adolescents.

In addition to its known benefits for physical health, can physical activity also reduce depressive symptoms and improve the quality of life? Happily, the answer is yes!

There are many causes for depression, and regular physical activity has been shown to be an effective method for feeling better and reducing symptoms in people with major depression. Physical activity has also been shown to lower the odds of developing depressive symptoms over the lifespan.

How much activity is needed to get these results? *The Physical Activity Guidelines for Americans* recommend that adults engage in moderate-intensity aerobic activity totally at least 150 minutes per week in bouts of

at least 10 minutes. The best benefits seem to occur when the activity is spread over several days. Individuals who prefer could substitute 75 minutes of vigorous exercise or combine moderate-intensity and vigorous-intensity activity. The guidelines also recommend muscle-strengthening activities on 2 or more days per week. The guidelines acknowledge by following the recommendation of accumulating 150 minutes of physical activity per week, there is strong evidence that it can reduce depression symptoms for adults, and moderate evidence that it does the same for adolescents.

Here are some tips for someone who is managing depression. If you are a care provider, friend or family member consider how you can play a role in supporting their physical activity efforts.

## Motivation

How would feeling better change your day?

- Find a picture that motivates you and hang it somewhere you can see it every day—perhaps your bathroom mirror or bedside.
- Share your motivation with someone in your daily life.
- Having variety and fun in the type of physical activity you do can prevent boredom and help you stick to your habit better.

## Schedule

Consistency is key! All you need is 150 minutes of physical activity each week, so if it is easier to do short bouts five days a week or longer bouts three days a week, pick one and stick to it to feel the benefits!

- Choose what days of the week you will exercise.
- Pick what time fits into your day best (before work, lunch, after work).
- Write down your schedule.
- Set reminders in your phone, if possible.
- Do not let inconveniences get the best of you.

## Accountability

The more you can encourage and help someone stick to their schedule the happier they will be, and so will you, even if you do not feel up to it in the moment.

- Have someone in your life check in to see how your new habit is going.
- When possible, make an appointment with someone who will always show up and expect you to do the same!

Even if you are not clinically depressed, your mood will still benefit from regular physical activity, so buddy up and feel better together!

# For Athletes Who Struggle with Food and Weight...

by Nancy Clark, M.S., R.D., C.S.S.D., FACSM



Too many athletes (males and females alike) struggle with food and weight. Their common belief is “the lighter I am, the better I’ll perform.” Not true, if the cost of attaining the perfect body is poorly fueled muscles, overuse injuries, and a dysfunctional relationship with food.

If you are an athlete who struggles with losing those last few pounds, take note. Weight issues may have little to do with body fat and more to do with “I’m not good enough.” Haven’t we all, as athletes, had that thought? And certainly, some athletes struggle with the “I’m not good enough” belief far more than others. They are the ones who can easily cross the line into having an eating disorder.

An eating disorder distracts the athlete from the feelings that come with being “not good enough.” After all, if you are always thinking about whether or not eat, and how much to exercise, you are not thinking about feeling imperfect or inadequate. Unfortunately, using food to distract from those feelings can end up hurting your performance.

The following information, presented at a conference in Boston organized by the Multiservice Eating Disorders Association (MEDA), offers food for thought for athletes who struggle with finding the right balance of food, weight, and exercise. For additional information, check out MEDA’s website, [www.MEDAinc.org](http://www.MEDAinc.org). It’s filled with helpful resources for teammates, friends and family members, as well as athletes with anorexia, bulimia, and food obsessions.

## Food for thought

- Anorexia has the highest mortality rate of any mental illness. Whether death is from heart arrhythmias or suicide, we need to

pay attention when athletes struggle with food.

- Just as athletes with anorexia lose arm and leg muscle that helps them be strong athletes, they simultaneously lose heart muscle. The heart gets smaller and cannot respond to stress. The resulting arrhythmias can be a cause of death.
- The purging associated with bulimia takes its toll in terms of not only electrolyte imbalance associated with vomiting, but also gray teeth (due to erosion of tooth enamel on the inside of the mouth), and dental caries. The person may also suffer from acid reflux, difficulty swallowing, and chronic constipation (if purging includes laxative abuse).
- Thankfully, many medical issues are reversible but two “biggies” can remain problematic: 1) cognitive dysfunction due to the brain shrinking and 2) bone health. The bones (particularly in the spine, hip, and wrist) lose density. This increases the risk of stress fractures today and osteoporosis in later years. A shocking one-fourth of young women (<20 years) who suffer from anorexia have early osteoporosis. Some end up in severe pain for their lifetime, others in wheelchairs. Teens need to be fully aware they are not only losing bone density but also are not gaining it, as should happen during teenage years. Surprisingly, men with anorexia end up with worse osteoporosis than women.
- Any female athlete with amenorrhea (loss of her menstrual period for more than 3 months) should get her bone density measured for a baseline. Should she also take a birth control pill to force the return of menses? Current research suggests not. The pill offers a false sense of recovery, plus does not enhance bone density. The better path is to eat enough food to restore the body to an appropriate weight.
- Beware that eating a very high fiber can interfere with calcium absorption. No need for more than 25 to 35 grams of fiber per day!
- People with eating disorders commonly have high cholesterol levels. The solution is not to limit red meat and eggs; rather, the athletes need to normalize their entire diet.
- Medical symptoms that raise red flags include: heart rate less than 40 beats per minute, body temperature less than 95°F (35°C), blood pressure less than 70/40, and low blood glucose (<60 mg/dL) between meals. These numbers are sometimes seen in highly trained athletes; hence to identify those with eating disorders can be tricky. Other red flags include noticeable “fur” on arms

and face (lanugo hair, for warmth), brittle fingernails, blue fingertips, itchy dry skin, and a yellow skin tone due to overindulging in carrots and orange vegetables.

- Athletes with anorexia may complain about “feeling full” despite a small food intake, and food that just “sits in the stomach.” The solution is to force themselves to gradually increase their intake. Even though they may not feel hungry, their body is starving and needs fuel.

## Do people recover?

Yes, usually with help from a therapist, registered dietitian (RD) and medical team. Some people get tired of the eating disorder and learn to accept their perceived body flaws. Others get scared when they vomit blood. Some find hope in a new personal relationship —Maybe I am good enough to be loved!—or choose to eat better so they can get pregnant.

One pathway for recovery is to see the eating disorder as being just one part of you. It is the part that tries to protect your other parts that don’t like feeling lonely, rejected or imperfect. For example, perhaps you had traumatic experiences in middle school. Your eating disordered part can distract and numb feelings of pain, terror and fear. It keeps you feeling more in control of life.

Try talking to your eating disorder and ask, “Please tell me why you are here? What are you trying to do for me?” The ED part might answer “I’m trying to distract you and protect you from painful feelings—you know, the shame you felt as a kid in middle school...” Yet, we all know that starving one’s body does not solve any problems. Hence, a probing question is, “How effective on a scale of 1 to 10 (with 10 being 100% effective) is the eating disorder in making you happy in your core?” Most athletes with eating disorders are miserable.

Using a model of recovery such as Internal Family Systems ([www.selfleadership.org](http://www.selfleadership.org)), athletes can discover their core that is centered, competent, secure, self-assured, relaxed and able to both listen to and respond to feedback. These core values can displace the eating disordered voices and lead to a happier, healthier life and improved performance. Is it time for you to stop struggling and start living and performing better?

**Q&A (continued from page 2)**

because it has a reasonable side effect profile. Research has shown that the effects of hydrochlorothiazide in lowering blood pressure were similar to other blood-pressure-lowering agents, making it a good choice.

The target of lowering blood pressure is usually 140/90. However, because African-Americans need more aggressive treatment, experts suggest you aim for 130/85 with treatment. Combination treatment with more than one drug is often more successful.

Black Americans face increased morbidity and mortality rates from cardiovascular disease, greater prevalence of hypertension, and altered responses to vasodilator medications compared with white Americans. According to the American Heart Association, more than 36% of African-American men have high blood pressure, compared to 25.2% for Caucasian men and 24.2% for Hispanic



men. The association between hypertension and African-Americans has been linked to impaired vascular function in small blood vessels.

This underscores the importance that everyone monitor blood pressure and take measures—including recommended levels of physical activity—to maintain overall health and fitness.



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